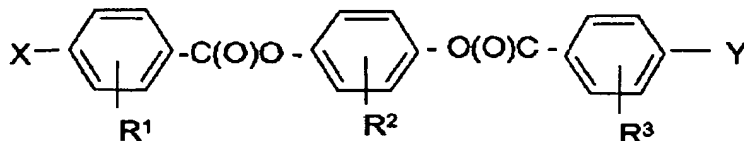


**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 1.-185. (Canceled).

1 186. (Currently amended) Mesogens having the following formula:



2 wherein

3 X and Y independently are selected from the group consisting of amino groups,  
4 polymerizable groups, and combinations thereof, provided that when X is  
5 polymerizable group, Y is amino group;

6 R<sup>2</sup> is selected from the group consisting of t-butyl groups, isopropyl groups, and  
7 secondary butyl groups; and

8 R<sup>1</sup> and R<sup>3</sup> are selected from the group consisting of hydrogen and a methyl group  
9 less bulky than R<sup>2</sup>.

10 187. (Previously presented) The mesogens of claim 186 wherein said  
1 polymerizable groups have polymerizable unsaturated carbon-carbon bond.

1 188. (Previously presented) The mesogens of claim 186 wherein said  
2 polymerizable groups are selected from the group consisting of acryloyloxy alkoxy  
3 groups and methacryloyloxy alkoxy groups having alkyl moiety with from 2 to 12 carbon  
4 atoms.

1 189. (Previously presented) The mesogens of claim 188 wherein said alkyl  
2 moiety consists essentially of from 2 to 12 carbon atoms and CH<sub>2</sub> groups optionally are  
3 substituted by groups selected from the group consisting of oxygen, sulfur, and ester  
4 groups; provided that two or more carbon atoms separate said oxygen from said ester  
5 groups.

1 190. (Previously presented) The mesogens of claim 189 wherein said alkyl  
2 moiety consists essentially of a total of from 2 to 9 carbon atoms.

1 191. (Previously presented) The mesogens of claim 189 wherein said alkyl

BEST AVAILABLE COPY

2 moiety consists essentially of a total of from 2 to 6 carbon atoms.

1 192.-193. (Canceled)

1 194. (Currently amended) The mesogens of claim 186 wherein one or more  
2 ~~member~~members selected from the group consisting of X and Y further consists  
3 essentially of a spacer group.

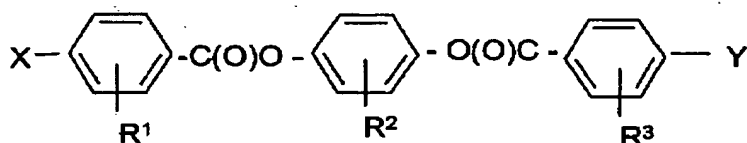
1 195. (Currently amended) The mesogens of claim 187 wherein one or more  
2 ~~member~~members selected from the group consisting of X and Y further consists  
3 essentially of a spacer group.

1 196. (Currently amended) The mesogens of claim 186 wherein one or more  
2 ~~member~~members selected from the group consisting of X and Y is a cinnamoyloxy  
3 group.

1 197. (Currently amended) The mesogens of claim 194 wherein one or more  
2 ~~member~~members selected from the group consisting of X and Y is a cinnamoyloxy  
3 group.

1 198. (Currently amended) The mesogens of claim 195 wherein one or more  
2 ~~member~~members selected from the group consisting of X and Y is a cinnamoyloxy  
3 group.

1 199. (Currently amended) Mesogens having the following formula:



2 wherein

4 X is a polymerizable group selected from the group consisting of acryloyloxy alkoxy  
5 groups and methacryloyloxy alkoxy groups having alkyl moiety with from 2 to 12  
6 carbon atoms comprising polymerizable unsaturated carbon-carbon bond;

7 Y ~~comprises~~consists essentially of an amino group;

8 R<sup>2</sup> is selected from the group consisting of alkyl groups having from about 1 to 6 carbon  
9 atoms and aryl groups; and

10 R<sup>1</sup> and R<sup>3</sup> are selected from the group consisting of hydrogen and a methyl group  
11 less bulky than R<sup>2</sup>.

1 200. (Canceled).

BEST AVAILABLE COPY

1 201. (Currently amended) The mesogens of claim 200~~199~~ wherein said alkyl  
2 moiety consists essentially of from 2 to 12 carbon atoms and CH<sub>2</sub> groups optionally are  
3 substituted by groups selected from the group consisting of oxygen, sulfur, and ester  
4 groups; provided that two or more carbon atoms separate said oxygen from said ester  
5 groups.

1 202. (Previously presented) The mesogens of claim 201 wherein said alkyl  
2 moiety consists essentially of a total of from 2 to 9 carbon atoms.

1 203. (Previously presented) The mesogens of claim 201 wherein said alkyl  
2 moiety consists essentially of a total of from 2 to 6 carbon atoms.

1 204.-205. (Canceled).

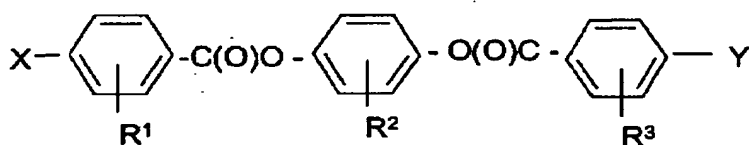
1 206. (Currently amended) The mesogens of claim 199 wherein one or more  
2 ~~membermembers~~ selected from the group consisting of X and Y further consists  
3 essentially of a spacer group.

1 207. (Currently amended) The mesogens of claim 201 wherein one or more  
2 ~~membermembers~~ selected from the group consisting of X and Y further consists  
3 essentially of a spacer group.

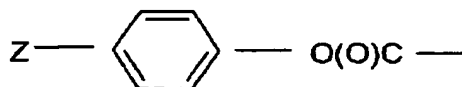
1 208. (Currently amended) The mesogens of claim 204 wherein one or more  
2 ~~membermembers~~ selected from the group consisting of X ~~comprises~~ and Y is  
3 cinnamoyloxy group.

1 208. (Canceled)

1 209. (Currently amended) Mesogens having the following formula:



2  
3 wherein X and Y independently are selected from the group consisting of spacer groups,  
4 polymerizable groups, and combinations thereof, wherein one or more  
5 ~~membermembers~~ selected from the group consisting of X and Y ~~havinghave~~ the  
6 following structure:



8 wherein Z is selected from the group consisting of spacer groups, terminal  
9 functionalities, polymerizable groups, and combinations thereof, said spacer  
10 groups being selected from the group consisting of H-(CH<sub>2</sub>)<sub>n</sub>-O- groups,  
11 Cl(CH<sub>2</sub>)<sub>n</sub>-O- groups, Br(CH<sub>2</sub>)<sub>n</sub>-O- groups, I(CH<sub>2</sub>)<sub>n</sub>-O-, wherein n is from about 2  
12 to about 12 wherein the CH<sub>2</sub> groups independently can be substituted by oxygen,  
13 sulfur, or an ester group; provided that at least 2 carbon atoms separate said  
14 oxygen or said ester group;

15 R<sup>2</sup> is selected from the group consisting of alkyl groups having from about 1 to 6 carbon  
16 atoms and aryl groups; and

17 R<sup>1</sup> and R<sup>3</sup> are selected from the group consisting of hydrogen and a methyl group  
18 ~~less bulky than R<sup>2</sup>.~~

1 210. (Previously presented) The mesogens of claim 209 wherein X and Y  
2 further consist essentially of functionalities independently selected from the group  
3 consisting of hydroxyl groups, amino groups, and sulfhydryl groups.

1 211. (Previously presented) The mesogens of claim 210 wherein n is from  
2 about 2 to 9.

1 212. (Previously presented) The mesogens of claim 210 wherein n is from 2 to  
2 6.

1 213. (Previously presented) The mesogens of claim 209 wherein said  
2 polymerizable groups have alkyl moiety having polymerizable unsaturated carbon-carbon  
3 bond.

1 214. (Previously presented) The mesogens of claim 210 wherein said  
2 polymerizable groups have alkyl moiety having polymerizable unsaturated carbon-carbon  
3 bond.

1 215. (Previously presented) The mesogens of claim 214 wherein said alkyl  
2 moiety has from 2 to 9 carbon atoms.

1 216. (Currently amended) The mesogens of claim 214 wherein said alkyl  
2 moiety has from ~~from~~ 2 to 6 carbon atoms.

1 217. (Previously presented) The mesogens of claim 209 wherein R<sup>2</sup> is selected  
2 from the group consisting of methyl groups, t-butyl groups, isopropyl groups, secondary  
3 butyl groups, and phenyl groups.

1           218. (Previously presented) The mesogens of claim 210 wherein  $R^2$  is selected  
2 from the group consisting of methyl groups, t-butyl groups, isopropyl groups, secondary  
3 butyl groups, and phenyl groups.

1           219. (Previously presented) The mesogens of claim 213 wherein  $R^2$  is selected  
2 from the group consisting of methyl groups, t-butyl groups, isopropyl groups, secondary  
3 butyl groups, and phenyl groups.

1           220. (Previously presented) The mesogens of claim 214 wherein  $R^2$  is selected  
2 from the group consisting of methyl groups, t-butyl groups, isopropyl groups, secondary  
3 butyl groups, and phenyl groups.

1           221. (Previously presented) The mesogens of claim 216 wherein  $R^2$  is selected  
2 from the group consisting of methyl groups, t-butyl groups, isopropyl groups, secondary  
3 butyl groups, and phenyl groups.

1           222.-223. (Canceled)

1           224. (Previously presented) The mesogens of claim 220 wherein R and  $R^3$  are  
2 selected from the group consisting of hydrogen and methyl group.

1           225. (Previously presented) The mesogens of claim 221 wherein R and  $R^3$  are  
2 selected from the group consisting of hydrogen and methyl group.

1           226. (Currently amended) The mesogens of claim 209 wherein one or more  
2 ~~member~~members selected from the group consisting of X and Y is cinnamoyloxy group.

1           227. (Currently amended) The mesogens of claim 217 wherein one or more  
2 ~~member~~members selected from the group consisting of X and Y is cinnamoyloxy group.

1           228. (Currently amended) The mesogens of claim ~~222221~~ wherein one or  
2 more ~~member~~members selected from the group consisting of X and Y is cinnamoyloxy  
3 group.

BEST AVAILABLE COPY